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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/411,936	10/04/1999	CHARLES P. BARBER	283P263	9016
20874	7590	08/12/2004	EXAMINER	
WALL MARJAMA & BILINSKI 101 SOUTH SALINA STREET SUITE 400 SYRACUSE, NY 13202			FRECH, KARL D	
			ART UNIT	PAPER NUMBER
			2876	

DATE MAILED: 08/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/411,936	<b>Applicant(s)</b> BARBER ET AL.	
	<b>Examiner</b> Karl D Frech	<b>Art Unit</b> 2876	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 20 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1,3-19 and ~~30-62~~ <sup>37,41-82</sup> is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-19 and ~~30-62~~ <sup>37,41-82</sup> is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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1. Applicant's Appeal Brief filed 1/20/04 has been fully considered and deemed persuasive to overcome the prior art Final Rejection issued 4/9/03. However, upon updating the search, a new reference has been found which anticipates at least some of the claims as seen below. Therefore, the new Non-Final Office action is issued. Any inconvenience due to the reopening of this application after final is regretted.

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1,3,6,39,41,44,68,69,70,71 are rejected under 35 U.S.C. 102(e) as being anticipated by Bunte et al 6,034,379. Bunte discloses in figures 19, and in column 28 lines 22+ an imaging module with an illuminator array 1947 and a sensor assembly 1949 on a single circuit board 1967. It is disclosed in column 27 lines 35+ that the sensor assembly comprises a photo array 1929 that captures a 2-D image of the code being imaged. It is disclosed in column 27 lines 7+ that the illuminator is a LED array, i.e. a plurality of individual light sources. These LED's illuminate and therefore are functional to aim the imaging sensor. There are disclosed elements 1973,1975,1977,1979 for mounting the

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circuit board within the larger housing of the imaging sensor, i.e. framework and housing. There is disclosed a planar optical element as window 1919.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 4,5,7-19,42,43,45-67,72-82 are rejected under 35 U.S.C. 103(a) as being unpatentable over O'Hagan et al in view of Bunte et al 6,034,379. As seen in the previous Final Rejection, O'Hagan discloses in figure 4 as described in column 6 line 20 – column 7 line 27, a scanning mechanism including a two dimensional photo sensing array 170 mounted on a circuit board 146. Also disclosed are illumination means 44 including LED's 180, targeting LED's 188,186 mounted on circuit board 146 which project targeting beams through an

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aperture in board 189. There is disclosed an image processor 120 mounted on the circuit board. As seen in the figure, the entire circuit board apparatus is enclosed and mounted within a housing including back and side walls 162.

O'Hagan discloses that his elements are mounted on four circuit boards, not a single circuit board as claimed when interpreted in lights of applicants disclosure. As seen above, Bunte discloses mounting the imaging array and light sources on a single circuit board. It would have been obvious to one of ordinary skill in the art at the time of the invention to mount the elements of O'Hagan on a single circuit board as taught by Bunte. As disclosed by Bunte in column 28, lines 25+, the single circuit board permits other types of interworking sensor lens systems and illuminator combinations to be collocated for further optical alignment or combined scanning motion. O'Hagan does not disclose the specific housing details as claimed of the "finger" mounting as claimed. Mounting "fingers" remain old and well known, as are "recesses" and alignment means in electronic equipment enclosing circuit boards. It would have been obvious to one of ordinary skill in the art at the time of the invention to mount the board of O'Hagan using mounting "fingers" and providing "recesses" for alignment in the housing of O'Hagan. This would reduce the cost of mounting while providing for a physically secure package.

7. Applicant's arguments with respect to the finally rejected claims, as seen in the previous action, have been considered but are moot in view of the new ground(s) of rejection. It is noted that applicant's arguments at least are

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sufficient to overcome the single circuit board argument. However, new art has been found which anticipates at least some of the pending claims.

8. This action IS NOT FINAL.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karl D Frech whose telephone number is (571) 272-2390. The examiner can normally be reached on maxi-flex.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G Lee can be reached on (571) 272-2398. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Karl D Frech  
Primary Examiner  
Art Unit 2876

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